

**Listing of Claims:**

1. (Currently Amended) A method for transmission of data over a data transmission network, comprising:

employing, in the data transmission network, ~~a network layer~~ an IP protocol from a first network node receiving data from a first circuit switched transmission line to a second network node transmitting data into a second circuit switched transmission line; and

determining, in accordance with a predefined rule, a destination address of a ~~network layer~~ an IP protocol datagram comprising data received from the first circuit switched transmission line for transmission to the second network node based on circuit switched channel identifying parameters which identify at least one channel in the second circuit switched transmission line and ~~the network layer~~ an IP protocol address of the second network node.

2. (Canceled)

3. (Currently Amended) The method ~~according to~~ of claim 1, wherein the ~~network layer~~ IP protocol is an X.25 protocol.

4. (Currently Amended) The method ~~according to~~ of claim 1, wherein data from at least one channel of the first circuit switched transmission line is transmitted as compressed data over the data transmission network.

5. (Currently Amended) The method ~~according to~~ of claim 4, wherein only compressed speech signal parameters of a signal received from a said at least one channel of the first circuit switched transmission line are transmitted over the data transmission network;

wherein said received signal comprises an uncompressed speech signal part and compressed speech parameters.

6. (Currently Amended) The method ~~according to~~ of claim 4, wherein the received signal of said at least one channel of the first circuit switched transmission line is compressed in the first network node.

7. (Currently Amended) The method ~~according to~~ of claim 4, wherein compressed speech parameters received from the first network node are decompressed into an uncompressed speech signal before transmission into the second circuit switched transmission line.

8. (Currently Amended d) The method ~~according to~~ of claim 1, wherein samples of data from more than one ~~of the at least one channel~~ channel of the first circuit switched transmission line are transmitted over the data transmission network in one ~~network-layer~~ IP protocol datagram.

9. (Currently Amended) The method ~~according to~~ of claim 1, further comprising the steps of:

transmitting a message which describes supported coding modes for compressed speech parameters from the first network node to the second network node; and

describing said supported coding modes in said transmitted message in an order of preference for optimizing speech data transmission.

10. (Currently Amended) A network element for connection of a circuit switched transmission line to a data transmission network employing ~~a network-layer~~ an IP protocol, wherein the network element comprises ~~a network-layer~~ an IP protocol address generating unit for generating network layer protocol addresses for ~~network-layer~~ IP protocol packets based at least partly on parameters identifying at least one channel of the circuit switch transmission line.

11. (Canceled)

12. (Currently Amended) The network element ~~according to~~ of claim 10, wherein the network element comprises a compressed speech parameter extraction unit for extracting

compressed speech parameters from at least one signal from the circuit switched transmission line, said at least one signal comprising an uncompressed speech signal part and compressed speech parameters.

13. (Currently Amended) The network element ~~according to~~ of claim 10, wherein the network element comprises a compression unit for compressing a signal of at least one channel of the circuit switched transmission line before transmission over the data transmission network.

14. (Currently Amended) A method for transmission of data over a data transmission network, comprising:

employing, in the data transmission network, ~~a network layer~~ an IP protocol from a first network node receiving data from a first circuit switched transmission line to a second network node transmitting data into a second circuit switched transmission line;

determining, in accordance with a predefined rule, a destination address of ~~a network layer~~ an IP protocol datagram comprising data received from the first circuit switched transmission line for transmission to the second network node based on circuit switched channel identifying parameters which identify at least one channel in the second circuit switched transmission line and ~~a network layer~~ an IP protocol address of the second network node; and

inserting status information into the datagram.

15. (Currently Amended) The method ~~according to~~ of claim 14, wherein said status information comprises at least an indicator to indicate activity of the at least one channel, a length of data samples of the at least one channel and whether channel information definition is comprised in the datagram.

16. (Currently Amended) A method for transmission of data over a data transmission network, comprising:

employing, in the data transmission network, ~~a network layer~~ an IP protocol from a first network node receiving data from a first circuit switched

transmission line to a second network node transmitting data into a second circuit switched transmission line;

determining, in accordance with a predefined rule, a destination address of ~~a network-layer~~ an IP protocol datagram comprising data received from the first circuit switched transmission line for transmission to the second network node based on circuit switched channel identifying parameters which identify at least one channel in the second circuit switched transmission line and ~~a network-layer~~ an IP protocol address of the second network node; and

determining an IP address based on a time slot number having data which is transferred in the datagram.

17. (Currently Amended) A network element configured to implement the method ~~according to~~ of claim 14.

18. (Currently Amended) A network element configured to implement the method ~~according to~~ of claim 16.

19. (Currently Amended) A method for transmission of data over a data transmission network, comprising:

employing, in the data transmission network, ~~a network-layer~~ an IP protocol from a first network node receiving data from a first circuit switched transmission line to a second network node transmitting data into a second circuit switched transmission line;

determining, in accordance with a predefined rule, a destination address of ~~a network-layer~~ an IP protocol datagram comprising data received from the first circuit switched transmission line for transmission to the second network node based on circuit switched channel identifying parameters which identify at least one channel in the second circuit switched transmission line and ~~a network-layer~~ an IP protocol address of the second network node;

inserting a number of data samples from said at least one channel of a transmission line into a payload portion of a data packet; and  
indicating a destination transmission line and a channel within the transmission line in a destination packet address.

20. (Currently Amended) A network element configured to implement the method according to of claim 19.